GENERAL ELECTRICAL NOTES

- 1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS AND AS REQUIRED BY CODE.
- 2. CONTRACT DOCUMENT DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY.
- 3. INSTALL ALL ELECTRICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- 4. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PAY FOR AND REPAIR ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES UNLESS OTHERWISE INDICATED.
- 5. COORDINATE CONSTRUCTION OF ALL ELECTRICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL WORK ETC., SHOWN ON OTHER CONTRACT DOCUMENTS.
- 6. ALL OPENINGS IN FIRE RATED ASSEMBLIES DUE TO BOXES, CONDUIT, ETC., SHALL BE FIRE STOPPED WITH UL CLASSIFIED PENETRATION SYSTEM.
- 7. FLOOR SLABS SHALL BE X-RAYED BEFORE ANY CORE DRILLING IS COMMENCED.
- 8. FINAL TESTING: TEST ALL CONNECTIONS AT PANEL BOARDS, DEVICES, AND EQUIPMENT AND ALL SPLICES. EACH BRANCH CIRCUIT AND ITS RESPECTIVE CONNECTED EQUIPMENT MUST TEST FREE OF SHORT CIRCUITS. UPON COMPLETION OF THE WORK, CLEAN AND POLISH ALL EXPOSED SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 9. ELECTRICAL CONTRACTOR SHALL VERIFY THE ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLATION.
- 10. ALL WIRES SHALL BE COPPER WITH 600 VOLT INSULATION UNLESS OTHERWISE NOTED.
- 11. PROVIDE LINE VOLTAGE BREAKERS AND WIRING TO FEED ANY REQUIRED HVAC CONTROLS.
- 12. ALL SWITCHBOARDS, SWITCHGEAR, AND PANEL BOARDS SUPPLIED BY A FEEDER(S) IN OTHER THAN ONE— OR TWO—FAMILY DWELLINGS SHALL BE MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES. TYPICAL FOR ALL PANELS.

ELECTRICAL SPECIFICATIONS

1.0 RACEWAYS, BOXES, AND CONDUITS

- A. OUTDOOR WIRING METHODS:
- . ABOVEGROUND: RIGID OR INTERMEDIATE METAL CONDUIT.
- 2. UNDERGROUND: RIGID NONMETALLIC CONDUIT (PVC SCHEDULE 40) UNLESS OTHERWISE NOTED.
- 3. CONNECTION TO VIBRATING EQUIPMENT: LIQUIDTIGHT FLEXIBLE METAL CONDUIT.
- 4. BOXES AND ENCLOSURES: NEMA TYPE 3R. B. INDOOR WIRING METHODS:
- 1. EXPOSED: ELECTRICAL METALLIC TUBING.
- CONCEALED: ELECTRICAL METALLIC TUBING OR MC TYPE ARMORED CABLE.
- 2.1. CONNECTION TO VIBRATING EQUIPMENT: FLEXIBLE METAL CONDUIT, EXCEPT IN WET OR DAMP LOCATIONS USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT.
- 3. BOXES AND ENCLOSURES: NEMA TYPE 1, EXCEPT IN WET LOCATIONS USE TYPE LISTED FOR WET
- C. ALL CIRCUITRY IN FINISHED AREAS SHALL RUN CONCEALED. MINIMUM SIZE CONDUIT SHALL BE 3/4".
- D. EXPOSED AND CONCEALED CIRCUITRY (WHETHER CONDUIT OR CABLE) SHALL RUN TIGHT TO CEILING SLAB AS HIGH AS POSSIBLE TO MAXIMIZE HEADROOM IN A NEAT WORKMANLIKE MANOR. ALL RUNS SHALL BE PARALLEL OR PERPENDICULAR TO BUILDING WALLS.

2.0 WIRE AND CABLE

- A. ALL CONDUCTORS SHALL BE COPPER, MINIMUM #12, UNLESS OTHERWISE NOTED, WITH THHN—THWN INSULATION.

 B. ALL 130 VOLT CIRCUIT HOMERUNS THAT ARE OVER 100 LINEAR EFET SHALL BE #10 CONDUCTORS.
- B. ALL 120 VOLT CIRCUIT HOMERUNS THAT ARE OVER 100 LINEAR FEET SHALL BE #10 CONDUCTORS
- C. WHERE APPROVED BY THE AUTHORITY HAVING JURISDICTION MC CABLE MAY BE UTILIZED FOR INTERIOR BRANCH CIRCUITS.

3.0 GROUNDING

- A. GROUND ELECTRICAL SYSTEMS AND EQUIPMENT IN ACCORDANCE WITH NEC EXCEPT WHERE
- GROUNDING IN EXCESS OF NEC REQUIREMENTS IS INDICATED.
- B. ALL CIRCUITS SHALL CONTAIN A GROUNDING CONDUCTOR.
- C. SEPARATELY DERIVED SYSTEMS REQUIRED BY NEC TO BE GROUNDED SHALL BE GROUNDED AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

4.0 PANELBOARDS

- A. ALL PANELBOARDS SHALL BE EQUIPPED WITH COMMON KEYED LOCKS. PROVIDE A MINIMUM OF TWO KEYS PER PANEL. PANELBOARDS SHALL BE COMPLETE WITH DOOR IN DOOR TYPE COVERS AND TRIMS
- AND SHALL CONTAIN A GROUND BUS.

 B. BEFORE ORDERING PANELBOARDS COORDINATE ALL MOTOR CIRCUIT TRIPS WITH EQUIPMENT MANUFACTURERS REQUIREMENTS. COORDINATE CONDUCTOR SIZE WITH ACTUAL MOTORS AND OTHER EQUIPMENT FURNISHED BEFORE INSTALLING CIRCUITRY. ADJUSTABLE TRIP CIRCUIT BREAKERS SHALL BE SET BY THE CONTRACTOR IN THE FIELD.
- C. CREATE A DIRECTORY TO INDICATE INSTALLED CIRCUIT LOADS. INCORPORATE OWNER'S FINAL ROOM
- D. PANELBOARD NAMEPLATES: LABEL EACH PANELBOARD WITH A NAMEPLATE.

5.0 DISCONNECTS AND CIRCUIT BREAKERS

- A. ENCLOSED NON-FUSIBLE SWITCH SHALL HAVE AN ENCLOSURE TYPE CONSISTENT WITH THE ENVIRONMENT WHERE IT IS LOCATED. ENCLOSED FUSIBLE SWITCHES SHALL HAVE CLIPS TO ACCOMMODATE SPECIFIED FUSES, ENCLOSURE CONSISTENT WITH ENVIRONMENT WHERE LOCATED. SWITCHES SHALL HAVE MINIMUM FAULT CURRENT RATING OF 200,000 SYMMETRICAL RMS AMPERES.
- LOCATE DISCONNECT SWITCH (AND MOTOR CONTROLLER) FOR MECHANICAL EQUIPMENT TO PERMIT SERVICING OF EQUIPMENT. CHECK MOTORS FOR PROPER ROTATION. CONNECT CONDUCTORS AS REQUIRED BY MANUFACTURER.
- C. ENCLOSED MOLDED-CASE CIRCUIT BREAKER: FRAME SIZE, TRIP RATING, NUMBER OF POLES, AND AUXILIARY DEVICES AS INDICATED; INTERRUPTING CAPACITY RATING TO MEET AVAILABLE FAULT CURRENT, 10,000 SYMMETRICAL RMS AMPERES MINIMUM; WITH APPROPRIATE APPLICATION LISTING WHEN USED FOR SWITCHING FLUORESCENT LIGHTING LOADS OR HVAC EQUIPMENT.
- D. ENCLOSURE: NEMA TYPE 1 UNLESS SPECIFIED OR REQUIRED OTHERWISE TO MEET ENVIRONMENTAL
- CONDITIONS OF INSTALLED LOCATION.

 OUTDOOR LOCATIONS: TYPE 3R
- 2. PROPERLY SUPPORT DISCONNECT OR ENCLOSED CIRCUIT BREAKER ON WALL WITH METAL FRAMING AS
- PROVIDE FUSES IF REQUIRED BY MANUFACTURER OF EQUIPMENT FOR UL APPROVAL OR HACR CIRCUIT BREAKERS.

6.0 EQUIPMENT CONNECTION

A. EXTEND WIRING TO ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AND MAKE FINAL AND COMPLETE CONNECTIONS TO ALL EQUIPMENT. BEFORE ROUGHING IN THE LOCATION AND TYPE OF DEVICE SHALL BE VERIFIED FROM SHOP DRAWINGS OF THE EQUIPMENT.

7.0 EXISTING CONDITIONS

A. THE CONTRACTOR SHALL VISIT THE SITE, DETERMINE ALL CONDITIONS AND CIRCUMSTANCES UNDER WHICH THE WORK MUST BE DONE OR OTHER CIRCUMSTANCES WHICH WILL AFFECT THE WORK AND MAKE ALL NECESSARY ALLOWANCES BEFORE SUBMITTING HIS BID.



THOMAS FOULKES LLC MECHANICAL AND ELECTRICAL ENGINEERING 1107 POPLAR HILL RD BALTIMORE MD 21210 410.262.1806

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ELECTRICAL LEGEND SYMBOL DESCRIPTION NEW (THICK LINED) EXISTING TO REMAIN (THIN LINED) EXISTING TO BE REMOVED (DASHED) WEATHER PROOF GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE, 120 VOLTS PANELBOARD, SIZE AS NOTED DISCONNECT SWITCH 머 FUSED DISCONNECT SWITCH Œ٦ SINGLE POLE SWITCH 20A, 277V, 48" AFF BRANCH CIRCUIT WIRING. HASH MARKS INDICATE NUMBER OF WIRES. GROUND WIRE NOT SHOWN BUT TO BE PROVIDED AS PER NEC. NO HASH MARKS MEAN 2#12 & #12G. HOMERUN TO PANEL. HASH MARKS INDICATE NUMBER OF WIRES. GROUND WIRE NOT SHOWN BUT TO BE PROVIDED AS PER NEC. LETTER DENOTES PANEL DESIGNATION, NUMBER DENOTES CIRCUIT NUMBER. NO HASH MARKS MEAN 2#12 & #12G.

DAVID H. GLEASON ASSOCIATES, IN ARCHITECTS

> Arch Social Club Marque 2426 Pennsylvania Avenu

Date:
December 2, 2019

Revisions:

Sheet Title:

LEGEND AND

NOTES

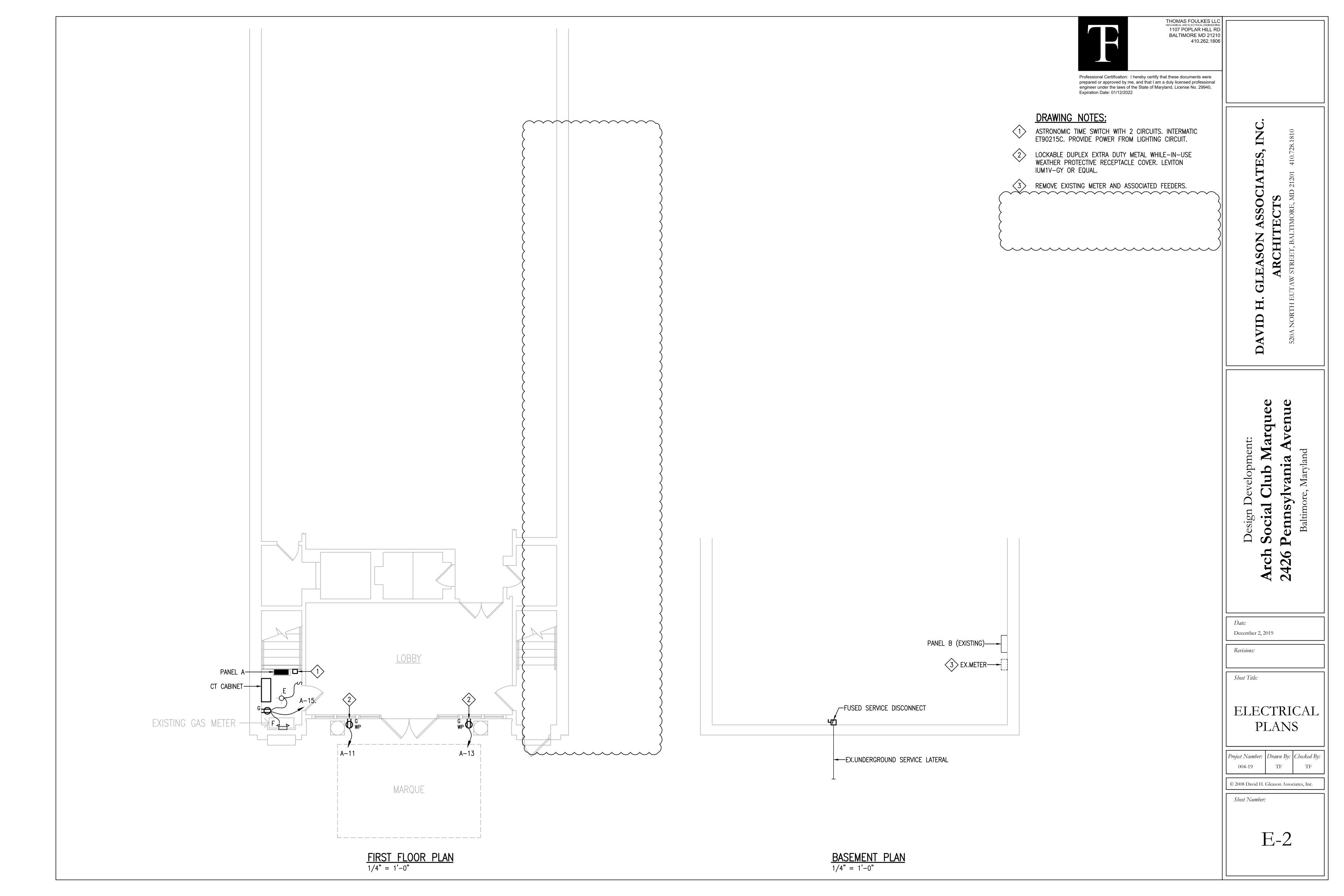
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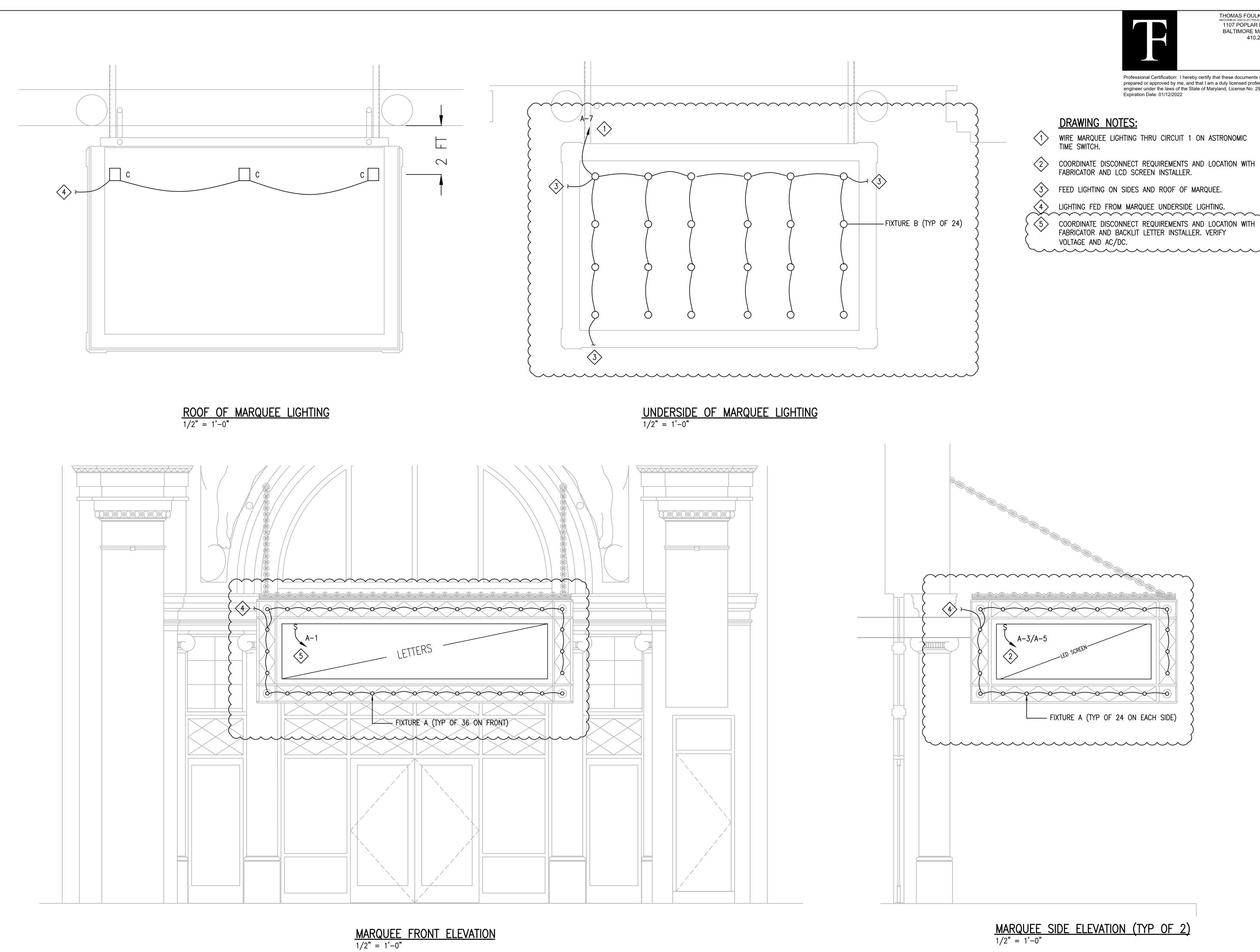
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- COORDINATE DISCONNECT REQUIREMENTS AND LOCATION WITH FABRICATOR AND BACKLIT LETTER INSTALLER. VERIFY

ASSOCI

Marque Club Social Arch 2426

December 2, 2019

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MARQUEE ELECTRICAL

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Sheet Number:

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GENERAL NOTE

ALL SWITCHBOARDS, SWITCHGEAR, AND PANEL BOARDS SUPPLIED BY A FEEDER(S) IN OTHER THAN ONE- OR TWO-FAMILY DWELLINGS SHALL BE MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES. TYPICAL FOR ALL PANELS.

CONDUIT AND WIRE SIZE SCHEDULE

UNLESS OTHERWISE INDICATED

WIRE

SIZE

12

12

10

10

8

GROUND

12

10

10

10

10

10

10

WHITE EMERGENCY LIGHT

SIZE

CIRCUIT

BREAKER

TRIP AMPS

15

20

25

30

35

40

45

50

60

70

90

100

1 OR 2 POLE CONDUIT

3/4"

3/4"

3/4"

3/4"

3/4"

1-1/4"

1-1/4

1-1/4" | 1-1/4"

1-1/4" 1-1/4"

3 | 1-1/4" | 1-1/4"

3/4"

3/4"

3/4"

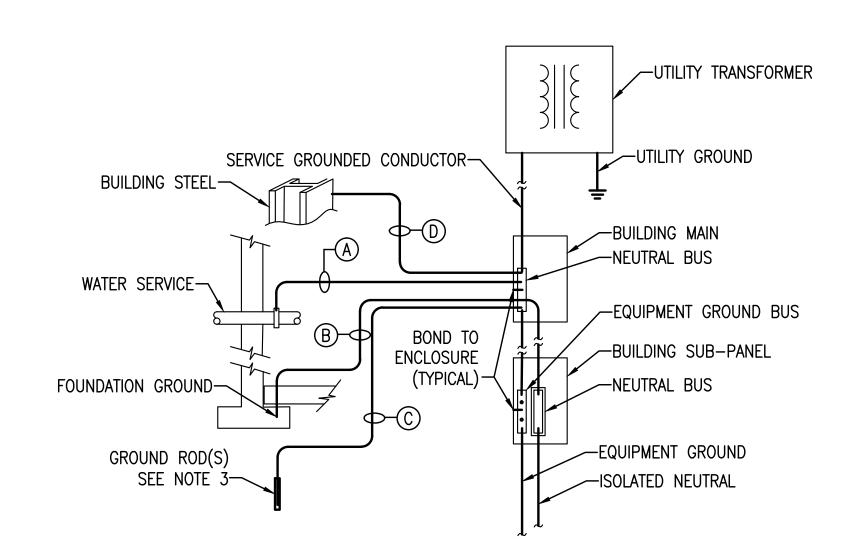
3/4"

3/4"

3/4"

VO WII	WER PANEL: A LTS: 120/240 PHASE: 1 RE: 3 CLOSURE NEMA: 1										MOUNTING: SURFACE BUS RATING: 400A MAIN OC DEVICE: 400A MINIMUM AIC: 22K
C K T	DESCRIPTION	V-A	POLE	B R K R	,	Δ	В	B R K R	РОГШ	V-A	DESCRIPTION
1	MARQUEE SCREEN 1	1400	1	20						0	
3	MARQUEE SCREEN 2	1400	1	20		•				0	
5	MARQUEE SCREEN 3	1400	1	20	•					0	
7	MARQUEE LIGHTS	800	1	20						0	
ý	ŠPAŘE ŠPAŘE		1	20						0	1
11	FRONT OUTDOOR RECEPT 1	300	1	20		•				0	1
13	FRONT OUTDOOR RECEPT 2	300	1	20	•					0	1
15	ELECTRICAL ROOM RECEPT AND LGT	500	1	20		_				0	1
17		0			•					0	1
19		0				•				0	2
21		0			•					0	2
23		0				•				0	2
25		0			•					0	2
27		0				_				0	2
29		0			•					0	3
31		0				_				0	3
33		0			•					0	3
35		0				_				0	3
37		0			•					0	3
39		0				_		200	2		PANEL B IN BASEMENT 4
41		0				-		_	_	16000	SUBFEED BREAKER 4
CON	NNECTED LOAD (VA) PHASE A =	19100	TO	TAL C	ONNE	CTE	D LOA	D VA	=	38100	TOTAL DEMAND LOAD VA = 381

NOTE: PROVIDE PANEL WITH 2P 200A SUBFEED BREAKER



MAIN GROUNDING ELECTRODE DETAIL NOT TO SCALE

- CONCRETE ENCASE ELECTRODE.
- 2. IF CONTINUOUS METALLIC WATER PIPE OR BUILDING STEEL IS NOT AVAILABLE THEN GROUNDING ELECTRODE SHALL BE FULL SIZE.
- 3. PROVIDE ADDITIONAL RODS AS NEEDED FOR TOTAL RESISTANCE OF 25 OHMS OR LESS.

GROUND CO	NDUC	TOR T	ABLE	
SERVICE SIZE	Α	В	С	D
100A	#8	#4	#6	#8
200A	#4	#4	#6	#4
400A	1/0	#4	#6	1/0
600 OR 800A	2/0	#4	#6	2/0
OVER 800A	3/0	#4	#6	3/0
NOTE: SIZES BASED ON COPPER CONDUCTORS				



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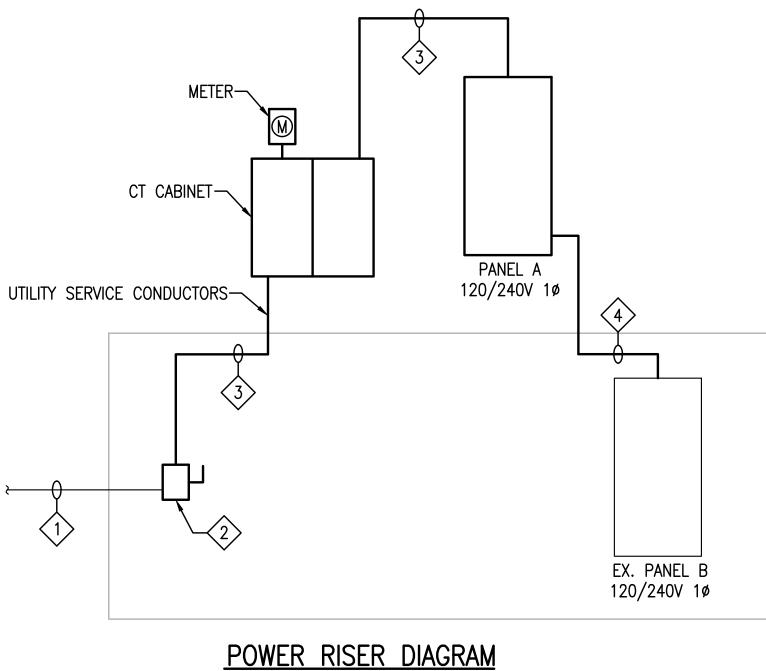
DRAWING NOTES:

- EXISTING 120/240V 10 200A SERVICE. COORDINATE WITH BGE TO UPGRADE SERVICE TO 400A.
- SEALABLE SERVICE ENTRANCE RATED FUSED SAFETY SWITCH. 3P, 400A, 240V IN NEMA 1 ENCLOSURE. VERIFY COMPLIANCE WITH BGE PRIOR TO INSTALLATION. PROVIDE 400A FUSES AND METAL SUPPORT STRUCTURE. IF NOT REQUIRED BY ELECTRICAL INSPECTOR THIS MAY BE OMITTED.
- 3 3#500 & #3G IN 3"C.

120

WITH BATTERY BACKUP

4 3#3/0 G IN 2"C



NOT TO SCALE

	3
METER—	
	_
CT CABINET—	
UTILITY SERVICE CONDUCTORS—	PANEL A 120/240V 1ø
	4>
3>	
<u>, , , , , , , , , , , , , , , , , , , </u>	
	EX. PANEL B 120/240V 1ø
	120/240V 1ø

LIGHT FIXTURE SCHEDULE TYPE VOLTAGE MAKE/MODEL DESCRIPTION NOTES MARQUEE MARKER 120 RAL COLORS ABL-WINONA LIGHTING MARKERO1 RND PTN2 WL LSR1 WHT30K MVOLT FL1 SGW MARQUEE DOWNLIGHT 120 ABL-JUNO 2LEDDRIVER G2 10LM MVOLT ZT WITH 2LEDTRIM G2 DC 30K 80CRI NFL WWH 120 FACADE FLOOD ABL-LITHONIA LIGHTING DSXF1 LED P1 30K FL MVOLT FV YKC62 DNAXD NOT USED ELECTRICAL ROOM SURFACE LITHONIA 888791197921 120

LITHONIA ELM4L

ASSOCI ASON

Marque Club Pennsylvan Social Arch 2426

December 2, 2019

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SCHEDULES AND RISER

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